

WHAT IS CLAIMED IS:

1. A magnetic-tape recording apparatus for recording digital data on a magnetic tape by a rotating head, comprising:

first obtaining means for obtaining predetermined-unit video data;

second obtaining means for obtaining audio data corresponding to the predetermined-unit video data;

synthesizing means for synthesizing the predetermined-unit video data and the audio data corresponding to the predetermined-unit video data such that they are continuous on a track in the magnetic tape without any space disposed therebetween; and

sending means for sending data synthesized by the synthesizing means to the rotating head in order to record the data on the magnetic tape.

2. A magnetic-tape recording apparatus according to Claim 1, further comprising compression means for compressing the high-quality video data obtained by the first obtaining means,

wherein the first obtaining means obtains, as the video data, high-quality video data; and

the predetermined-unit video data is the data of

pictures whose number is indicated by the value of M in a GOP structure.

3. A magnetic-tape recording apparatus according to Claim 2, wherein the compression means compresses the high-quality video data by an MP@HL or MP@H-14 method.

4. A magnetic-tape recording apparatus according to Claim 2, further comprising third obtaining means for obtaining, as the video data, compressed standard video data,

wherein the high-quality video data obtained by the first obtaining means includes distinguish information for distinguishing the high-quality video data from the standard video data; and

the synthesizing means selects the high-quality video data compressed by the compression means or the compressed standard video data obtained by the third obtaining means and synthesizes.

5. A magnetic-tape recording method for a magnetic-tape recording apparatus for recording digital data on a magnetic tape by a rotating head, comprising:

a first obtaining step of obtaining predetermined-unit video data;

a second obtaining step of obtaining audio data

corresponding to the predetermined-unit video data;

a synthesizing step of synthesizing the predetermined-unit video data and the audio data corresponding to the predetermined-unit video data such that they are continuous on a track in the magnetic tape without any space disposed therebetween; and

a sending step of sending data synthesized by a process in the synthesizing step to the rotating head in order to record the data on the magnetic tape.

6. A recording medium for recording a computer-readable program which controls a magnetic-tape recording apparatus for recording digital data on a magnetic tape by a rotating head, the program comprising:

a first obtaining step of obtaining predetermined-unit video data;

a second obtaining step of obtaining audio data corresponding to the predetermined-unit video data;

a synthesizing step of synthesizing the predetermined-unit video data and the audio data corresponding to the predetermined-unit video data such that they are continuous on a track in the magnetic tape without any space disposed therebetween; and

a sending step of sending data synthesized by a process in the synthesizing step to the rotating head in order to

record the data on the magnetic tape.

7. A magnetic-tape reproduction apparatus for reading by a rotating head a magnetic tape into which compressed, high-quality or standard, predetermined-unit, video data and audio data corresponding to the predetermined-unit video data are recorded such that they are continuous on a track without any space disposed therebetween, comprising:

first decompression means for decompressing the compressed, high-quality video data among data read from the magnetic tape by the rotating head;

second decompression means for decompressing the compressed audio data among the data read from the magnetic tape by the rotating head;

detecting means for detecting distinguish information for distinguishing the video data from the audio data, from the data read from the magnetic tape by the rotating head; and

selection means for selecting the first decompression means or the second decompression means according to the result of detection performed by the detecting means to process the data read from the magnetic tape by the rotating head.

8. A magnetic-tape reproduction apparatus according to

Claim 7, wherein the first decompression means decompresses the high-quality video data by an MP@HL or MP@H-14 method.

9. A magnetic-tape reproduction method for a magnetic-tape reproduction apparatus for reading by a rotating head a magnetic tape into which compressed, high-quality or standard, predetermined-unit, video data and audio data corresponding to the predetermined-unit video data are recorded such that they are continuous on a track without any space disposed therebetween, comprising:

a first decompression step of decompressing the compressed, high-quality video data among data read from the magnetic tape by the rotating head;

a second decompression step of decompressing the compressed audio data among the data read from the magnetic tape by the rotating head;

a detecting step of detecting distinguish information for distinguishing the video data from the audio data, from the data read from the magnetic tape by the rotating head; and

a selection step of selecting a process performed in the first decompression step or in the second decompression step according to the result of detection performed in the detecting step to process the data read from the magnetic tape by the rotating head.

10. A recording medium for recording a computer-readable program which controls a magnetic-tape reproduction apparatus for reading by a rotating head a magnetic tape into which compressed, high-quality or standard, predetermined-unit, video data and audio data corresponding to the predetermined-unit video data are recorded such that they are continuous on a track without any space disposed therebetween, the program comprising:

a first decompression step of decompressing the compressed, high-quality video data among data read from the magnetic tape by the rotating head;

a second decompression step of decompressing the compressed audio data among the data read from the magnetic tape by the rotating head;

a detecting step of detecting distinguish information for distinguishing the video data from the audio data among the data read from the magnetic tape by the rotating head; and

a selection step of selecting a process performed in the first decompression step or in the second decompression step according to the result of detection performed in the detecting step to process the data read from the magnetic tape by the rotating head.